

CLAIMS:**1.** A system comprising:

a synchronized network of at least three search and track radars and associated processing means and communication channel; the radars are
5 configured to detect and track at least one target; in response to detected at least one target, at least one interceptor is launched towards said at least one target; the radars are configured to measure and track the at least one target and the at least one interceptor; the target and interceptor ranges are accurately measured by said
10 at least three radars in the synchronized network, giving rise to synchronized accurate range measurements; the synchronized measurements are combined by range triangulation to provide accurate target and interceptor position measurements irrespective of the angular measurement accuracy of each radar; the processing means are configured to utilize the measurements to calculate
15 interceptor maneuvers required to overcome errors and bring the interceptor close to a target; the maneuver commands are transmitted to the interceptor using the communication channel; the interceptor is equipped with kill mechanism designed to destroy a target warhead when said interceptor approaches the target.

2. The system according to Claim 1, wherein said range triangulation provides accurate target and interceptor position measurements which do not
20 deteriorate linearly with range and said interceptor does not employ on-board seeker.

3. A rolling interceptor being devoid of inertial roll sensor and equipped with circumferential communication antennae that are configured to receive maneuvering commands from a command transmitter; the interceptor is
25 configured to use said antennae to provide a reference for resolution of the maneuvering commands.